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**Section B**

|  |  |
| --- | --- |
| NU logos.PNG  Database systems fall 22 project |  |

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# Requirements Analysis

## Hospital is divided into Wards:

* + A **unique** Ward name
  + **Unique** ID
  + Specialty
  + ID of day sister
  + ID of night sister

## Nurses work for a ward:

* + A **unique** Nurse ID
  + Name
  + Role (Day sister, Night sister, staff nurse)
  + Is the nurse registered for nursing (true if nurse is registered, else false)
  + CNIC
  + Address
  + Phone number

## Doctor:

* + A **unique** Doctor ID
  + Name
  + CNIC
  + Address
  + Phone number

## Patient is treated by doctor:

* + A **unique** patient ID
  + Name
  + Address
  + CNIC
  + Phone Number
  + Date of Birth

## A nurse is in charge of one Care-Unit:

* + A **unique** unit ID
  + ID of nurse in charge

## Each care-unit has a Bed:

* + **Unique** Bed ID
  + Purchase Date
  + Availability (true/false)

## Team of doctors is led by a consultant doctor:

* + A **unique** team ID
  + Date when team was formed
  + ID of leading consultant

## Team has **Members:**

* + A Member’s **unique** doctor ID
  + Role
  + Performance Grade

## Each Member makes Progress:

* + A **Unique** progress ID
  + Performance Grade
  + Date of Grading

## Complaint is made by patient:

* + A unique code
  + Complaint type
  + Details

## Treatment is prescribed by doctor:

* + A **unique** treatment code
  + A name for the treatment/procedure
  + Cost of treatment
  + Start Date
  + End Date

## Medicine is part of the treatment:

* + A **unique** Medicine code
  + Brand Name
  + Generic name
  + Dosage

# ERD

Diagram, map

Description automatically generated

**(See attached JPEG image of above ERD for clarity)**

**\*ERD was made using *creately.com\****

# Mapping

***[NOTE: The foreign keys are shown with indented bullets under each table. This is due to arrows not being able to fit within one page]***

**Ward** (WID, WName, Specialty)

**Care\_Unit** (UnitID, WID)

* *WID references Ward(WID)*

**Nurse** (NID, N\_Name, CNIC, Address, phoneNo, Reg, UnitID)

* *UnitID references Care\_Unit(UnitID)*

**Bed** (BID, purch\_Date, available, UnitID)

* *UnitID references Care\_Unit(UnitID)*

**Patient** (PID, PName, CNIC, phoneNo, DoB, Address, Gender, UnitID, DocID)

* *UnitID references Care\_Unit(UnitID)*
* *DocID references Doctor(DID)*

**Complaint** (compCode, Type, Details, PID)

* *PID references Patient(PID)*

**Treatment** (TCode, TName, cost, SDate, EDate, DID)

* *DID references Doctor(DID)*

**Medicine** (MCode, GenName, BrandName, Dosage)

**Doctor** (DID, DName, CNIC, Address, phoneNo)

**Team** (TID, FormDate)

**Member** (MemID, Role, JoinDate, TID)

* *TID references Team(TID)*

**Progress** (ProgID, PerfGrade, GradeDate, MemID)

* *MemID references Member(MemID)*

**Treatment\_Med** (TCode, MCode)

* *TCode references Treatment(TCode)*
* *MCode references Medicine(MCode)*

**Doc\_Mem** (MemID, DID)

* *MemID references Member(MemID)*
* *DID references Doctor(DID)*

**Consultant** (DID, TID, Speciality)

* *DID references Doctor(DID)*
* *TID references Team(TID)*

**Admit** (UnitID, PID, AdmitDate)

* *UnitID references Care\_Unit(UnitID)*
* *PID references Patient(PID)*

**Bed\_Assign** (BID, PID)

* *BID references Bed(BID)*
* *PID references Patient(PID)*

**Sister** (WID, NID, Type)

* *WID references Ward(WID)*
* *NID references Nurse(NID)*

**Unit\_InCharge** (NID, UnitID)

* *NID references Nurse(NID)*
* *UnitID references Care\_Unit(UnitID)*

**Comp\_Treatment** (compCode, TCode)

* *compCode references Complaint(compCode)*
* *TCode references Treatment(TCode)*